



Attachment 3A TSF Cells 1 and 2 Stage 4 Commissioning Plan

This Environmental Commissioning Plan has been developed for the Mt Morgans TSF Cells 1 and 2 Stage 4 Works Approval Application

Commissioning of the TSF Cells 1 and 2 Stage 4 will include the following activities:

- Transport of tailings material from the Mt Morgans processing plant to the TSF; and
- Discharge of tailings to the TSF Cell 1 and 2.

Emissions and discharges associated with the commissioning activities, as outlined in the Works Approval Application include:

- Emissions to the environment through potential seepage from the TSF; and
- Leaks and spills of substance containing saline, alkaline or cyanide constituents (tailings) resulting in impact to soils and vegetation due to pipeline failure.

Construction of the TSF Cells 1 and 2 Stage 4 will be completed via an EPC contract whereby Genesis engaged a qualified and competent third party to complete the Engineering (E), Procurement (P) and Construction (C) activities under the guidance of a qualified engineer for the scope of the project, including commissioning.

Construction activities are due to commence in October 2025, with the first tailings deposited in January 2026 with a three-month commissioning period. Approximately 900,000 tonnes of tailings will be deposited during the commissioning period.

Commissioning process for the TSF and associated pipelines will have the following phases:

- **Precommissioning:** Comprising static checks on unpowered equipment to confirm that the infrastructure has been built according to specification;
- **Energisation:** the new equipment will be energised to ensure all systems are working;
- **Tails commissioning:** Comprising test operation of equipment with tailings; and
- **Compliance report:** Submission of compliance report to demonstrate compliance in accordance with the Works Approval.

During commissioning of each cell, deposition will be via a bank of perimeter embankment spigots, at 24m intervals, covering an embankment length of approximately 800m. During commissioning, deposition practices will continue to be in line with the Operating Manual intent, with spigoting of tailings progressively around the perimeter, creating a uniform beach surface to a consistent RL level on the internal embankment wall and a beach angle distribution which centralizes the supernatant water at the decant. To ensure a competent cell floor and wall integrity deposition methodology was adapted on a daily basis to ensure pooling water was displaced from the internal embankment to the decant tower as soon as practicable.

Ultimately, the commissioning dispositioning regime fell under the responsibility of the Mill Manager

During commissioning deposition, the aim will be to fill the low points in the cell beach floor and establish a consistent beach towards the decant tower and, therefore, the pond around the decant tower. Spigots may be cycled daily in each quarter but for the first couple of layers in the cell they may need to run for longer to fill in certain low points.

The commission phase of deposition is critical and requires a greater degree monitoring and operator participation than the normal operation phase.

The commissioning inputs and outputs do not materially differ from the existing tailings deposition process.

After commission, uniformic cyclic deposition will be undertaken in the longer term. It is intended that time limited operations of the TSF would commence under the Works Approval until the Mt Morgans Operating Licence (L9010/2016/1) is amended to allow normal operation of the infrastructure constructed under the Works Approval. Genesis acknowledge Condition 4.1.3 which states *The Works Approval Holder shall submit a commissioning report to the CEO within 3 months of the completion of commissioning of each stage.*

Table 1 below details the environmental performance monitoring which will be undertaken during commissioning to verify performance against the environmental performance criteria.

Table 1: Environmental Monitoring and Performance Criteria

Sampling Location	Frequency	Monitoring Parameters	Environmental Performance Criteria
Seepage and Groundwater Management			
New groundwater monitoring bores	Quarterly	Groundwater levels (SWL – static water level)	No significant changes to groundwater levels. Groundwater levels remain below the allocated 6mbgl licence limit
New groundwater monitoring bores	Quarterly	Laboratory analysis of pH, total dissolved salts (TDS) concentration and cyanide concentrations (total, free and WAD).	No significant changes to groundwater quality
TSF Underdrainage	Monthly	Cumulative volumes of water collected from the underdrainage.	Underdrainage system is removing excess water as planned
Pipeline Integrity			
Tailings Delivery Pipeline	Once per shift.	Visual inspection to confirm integrity	No spills or leaks identified
Embankment			
Embankments	Once per shift.	Check general structural integrity and visual signs of seepage through embankment. Visual inspection for slips, erosion problems including around survey pins, tension cracks etc. Problems to be referred to qualified geotechnical engineer for assessment.	No evidence of seepage through embankment. No sign of embankment degradation.

A Risk Assessment relating specifically to the commissioning of TSF Cell 2 Stage 9 is presented in Table 2 below.

Table 2: TSF Commissioning Environmental Risk Assessment

	Risk Pathway	Likelihood	Consequence	Risk	Actions to be implemented/Treatment	Likelihood	Consequence	Risk
Biodiversity/ Flora/ Fauna/ Ecosystem	Potential for tailings leaks, spills or spray to adversely impact the surrounding environment.	C	2	M (8)	All pipelines will be double skinned PE100 and will be constructed and installed in accordance with AS4130 and AS413, and the Plastics Industry Pipe Association of Australia Limited (PIPA) Guideline POP003. The tailings/groundwater transfer pipelines are connected to the Citect processing plant control system which monitors pressure in pipelines and water levels in tanks and dams. Upon an immediate drop in pressure within a pipeline or a dam is reaching capacity, mill control operators are alarmed. Pipelines are currently and will continue to be inspected as per DWER licence conditions. All pipelines are and will continue to be stored in V-drains sufficient to contain spillages between routine inspections.	D	2	L (5)
Loss or decline in surface and Groundwater quality.	Failure to maintain TSF wall integrity leads to seepage.	B	3	H (17)	Operate the TSF as per the MMGP TSF Operating Manual Emissions to water will be minimised through construction and operation of the Project in accordance with conditions set out in the Environmental Protection Act Works Approval and Licence.	D	2	L (5)

		CONSEQUENCES				
LIKELIHOOD		Very Low 1	Minor 2	Moderate 3	Major 4	Catastrophic 5
A	Almost Certain	H (11)	H (16)	E (20)	E (23)	E (25)
B	Likely	M (7)	H (12)	H (17)	E (21)	E (24)
C	Possible	L (4)	M (8)	H (13)	E (18)	E (22)
D	Unlikely	L (2)	L (5)	M (9)	H (14)	E (19)
E	Rare	L (1)	L (3)	M (6)	M (10)	H (15)

Matrix Legend:

- E:** Extreme risk Immediate action required, further reduction needed. If not possible, Country Manager or COO approval required
- H:** High risk Senior management attention needed
- M:** Moderate risk Management responsibility must be specified
- L:** Low risk Manage by routine procedure

